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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,256	11/20/2001	Rakesh Taori	NL 000632	9595

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EXAMINER	
PHAM, TUAN	

ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/989,256	TAORI ET AL.	
	Examiner	Art Unit	
	TUAN A PHAM	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 November 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/20/01, 08/26/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

2. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
(e) BACKGROUND OF THE INVENTION.
(1) Field of the Invention.
(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(f) BRIEF SUMMARY OF THE INVENTION.
(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(h) DETAILED DESCRIPTION OF THE INVENTION.
(i) CLAIM OR CLAIMS (commencing on a separate sheet).
(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manjunath et al. (U.S. Patent No.: 6,324,503, hereinafter, "Manjunath") in view of Suvanen (U.S. Patent No.: 6,633,536).

Regarding claim 1, Manjunath teaches a communication system (see figure 500) comprising a transmitter (see figure 7, transmitter 502, col.8, ln.52-62), a receiver (see figure 7, receiver 504, col.8, ln.52-62), and an up/down link communication channel (see figure 7, uplink path from TX 502 to RX 504, downlink path from RX 504 to TX 502) arranged for data communication from the transmitter through the up link communication channel to the receiver (see col.8, ln.41-61), whereby the

communication system is further arranged to feedback data from the receiver through the down link communication channel to the transmitter (see col.8, ln.41-61), the transmitter comprises resynchronization means (see col.9, ln.24-50) coupled to the down link communication channel for receiving BFI related data and in response thereto recommencing data communication over the up link communication channel (see figure 7, col.9, ln.13-51), in accordance with a resynchronization procedure, which starts from a predetermined state (see figure 5, ln.55-60).

It should be noticed that Manjunath fails to clearly teach receiver comprises a bad frame indicator (i.e., message decoder) for providing a bad frame indication (BFI) upon receipt of a corrupted frame, which is present in synchronized data communicated over the up link communication channel. However, Suvanen teaches such features (see figure 4, receiver 102, message decoder 120, col.2, ln.5-14, col.9, ln.1-11) for a purpose of decoding bad frames.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of receiver comprises a bad frame indicator (i.e., message decoder) for providing a bad frame indication (BFI) upon receipt of a corrupted frame, which is present in synchronized data communicated over the up link communication channel, as taught by Suvanen, into view of Manjunath in order to improve the data transmission in communication system.

Regarding claim 2, Manjunath further teaches the communication system comprising: transmitter and receiver comprise an encoder and decoder, whereby at

least the encoder is brought back to the predetermined state at recommencing data transmission (see figure 7, encoder 506, decoder 512, col.5, ln.52-67).

Regarding claim 3, Manjunath further teaches the communication system according to claim 1, comprising the resynchronization mean include a mutually coupled resynchronization encoder decoder pair for implement a possible resynchronization procedure (see figure 7, encoder 506, decoder 508, col.9, ln.24-52).

Regarding claim 4, Manjunath further teaches the communication system according to claim 1, comprising the resynchronization mean are arranged for effecting at least a partial reset of the transmitter upon receipt of BFI related data from the receiver (see col.9, ln.35-51).

Regarding claim 6, Manjunath teaches a transmitter for application in a communication system (see figure 500) according claim 1, comprising a transmitter (see figure 7, transmitter 502, col.8, ln.52-62), a receiver (see figure 7, receiver 504, col.8, ln.52-62), and an up/down link communication channel (see figure 7, uplink path from TX 502 to RX 504, downlink path from RX 504 to TX 502) arranged for data communication from the transmitter through the up link communication channel to the receiver (see col.8, ln.41-61), whereby the communication system is further arranged to feedback data from the receiver through the down link communication channel to the transmitter (see col.8, ln.41-61), the transmitter comprises resynchronization means (see col.9, ln.24-50) coupled to the down link communication channel for receiving BFI related data and in response thereto recommencing data communication over the up link communication channel (see figure 7, col.9, ln.13-51), in accordance with a

resynchronization procedure, which starts from a predetermined state (see figure 5, ln.55-60).

It should be noticed that Manjunath fails to clearly teach receiver comprises a bad frame indicator (i.e., message decoder) for providing a bad frame indication (BFI) upon receipt of a corrupted frame, which is present in synchronized data communicated over the up link communication channel. However, Suvanen teaches such features (see figure 4, receiver 102, message decoder 120, col.2, ln.5-14, col.9, ln.1-11) for a purpose of decoding bad frames.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of receiver comprises a bad frame indicator (i.e., message decoder) for providing a bad frame indication (BFI) upon receipt of a corrupted frame, which is present in synchronized data communicated over the up link communication channel, as taught by Suvanen, into view of Manjunath in order to improve the data transmission in communication system.

Regarding claim 7, Manjunath teaches a receiver for application in a communication system (see figure 500) according claim 1, comprising a transmitter (see figure 7, transmitter 502, col.8, ln.52-62), a receiver (see figure 7, receiver 504, col.8, ln.52-62), and an up/down link communication channel (see figure 7, uplink path from TX 502 to RX 504, downlink path from RX 504 to TX 502) arranged for data communication from the transmitter through the up link communication channel to the receiver (see col.8, ln.41-61), whereby the communication system is further arranged to feedback data from the receiver through the down link communication channel to the

transmitter (see col.8, ln.41-61), the transmitter comprises resynchronization means (see col.9, ln.24-50) coupled to the down link communication channel for receiving BFI related data and in response thereto recommencing data communication over the up link communication channel (see figure 7, col.9, ln.13-51), in accordance with a resynchronization procedure, which starts from a predetermined state (see figure 5, ln.55-60).

It should be noticed that Manjunath fails to clearly teach receiver comprises a bad frame indicator (i.e., message decoder) for providing a bad frame indication (BFI) upon receipt of a corrupted frame, which is present in synchronized data communicated over the up link communication channel. However, Suvanen teaches such features (see figure 4, receiver 102, message decoder 120, col.2, ln.5-14, col.9, ln.1-11) for a purpose of decoding bad frames.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of receiver comprises a bad frame indicator (i.e., message decoder) for providing a bad frame indication (BFI) upon receipt of a corrupted frame, which is present in synchronized data communicated over the up link communication channel, as taught by Suvanen, into view of Manjunath in order to improve the data transmission in communication system.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Manjunath et al. (U.S. Patent No.: 6,324,503, hereinafter, "Manjunath") in view of Suvanen (U.S. Patent No.: 6,633,536) as applied to claim 1 above, and further in view of Yao (Pub. No.: US 2002/0114342).

Regarding claim 5, Manjunath and Suvanen, in combination, fails to clearly teach the communication system comprising bad frame indicator is arranged for providing BFI related data containing acknowledgement information about the correct receipt of at least subsets of a frames and/or erasure information about the received bits in the frame. However, Yao teaches such features (see col.2, [0017], col.3, [0030-0032]) for a purpose of calculating the bit error rate.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of bad frame indicator is arranged for providing BFI related data containing acknowledgement information about the correct receipt of at least subsets of a frames and/or erasure information about the received bits in the frame, as taught by Yao, into view of Manjunath and Suvanen in order to improve the data transmission in communication system.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Galyas et al. (U.S. Patent No. 6,138,020), Mony (U.S. Patent No. 6,009,383), Yung (U.S. Patent No. 6,578,162), and Alanara et al. (Pub. No.: U.S. 2001/0046843) are not applied into this Office Action; they are also called to Applicants attention. They may be used in future Office Action(s). These references are also concerned for supporting the system and method for providing digital connection for voice activated services on wireless networks.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (703) 305-4987. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (703) 305-4708 and

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2643
October 15, 2004
Examiner

Tuan Pham

GEORGE ENG
PRIMARY EXAMINER